

# PATENT SPECIFICATION

(11)

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(21) Application No. 17934/73 (22) Filed 13 April 1973

(44) Complete Specification published 7 Jan. 1976

(51) INT. CL.<sup>2</sup> B65D 75/00

(52) Index at acceptance

B8C 12D2 19C 24B2 24B9B 25A 26 29A

B8P 6D 6E1 6Q 7C 8C1C1 8C1C2 8C1E 8M

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## (54) RETURNABLE WRAP-AROUND CARRIERS

(71) We, OLINKRAFT, INC., a corporation organized and existing under the laws of the State of Delaware, United States of America, of P.O. Box 488, Station 2, West Monroe, State of Louisiana, 71291, United States of America, do hereby declare the invention for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention relates generally to a wrap-around carrier for bottled beer and more particularly to a re-turnable wrap-around carrier which may be used to carry full bottles from the store to the consumer and may then be re-used to carry empty bottles from the consumer to the store and the carrier incorporates means for accomplishing this purpose.

In the packaging of beer bottles or the like, it is desirable to package the bottles in a carrier which completely encloses the bottles in order to prevent the sun's rays from having a deteriorating effect on the contents of the bottles as well as providing means for securely retaining the end bottles within the carrier while the carrier is being transported from the store to the consumer's home. The prior art devices generally comprise completely enclosed carriers having a generally elongated hole or pair of holes formed in the top panel, these holes serving as the carrying handle for the package.

In recent years the no-deposit beer bottle has become extremely popular with the purchaser who simply threw away the empty beer bottle as well as the empty carrier in which the bottles were packed whenever he was finished using both. However, recent trends in marketing today, due primarily to ecology considerations, tend to indicate

that the no-deposit beer bottle will someday become obsolete, and that the bottlers will return to the two-way deposit bottle which was quite prominent in the market-place in the early 1960s.

During that time when the returnable beer bottle was being used, attempts were made to provide a carrier such as before-mentioned with the carrier having a handle which was torn from the top panel of the carrier and which could be used to transport the carrier and empty bottles back to the store for return of the deposit. In two earlier types of carriers of this design problems were encountered in reinserting the empty bottles back into the carrier since, more often than not, portions of the top panel of the carrier had to be destroyed in order to get the full bottles out of the package. In addition, if the top panel was not destroyed, it was very difficult to reinsert the empty bottles into the carrier since they originally were packed in the carrier by the sides and top panel being formed around the bottles.

In an effort to eliminate the problems encountered in the prior art structures herebefore-mentioned, the invention seeks to provide a returnable wrap-around carrier which has a handle formed in an interior partition of the carrier which is accessible through an opening in the top panel of the carrier and may be used for transporting the carrier and full bottles from the store to the consumer and also for transporting the carrier, containing the empty bottles, from the consumer back to the store.

According to the invention there is provided a wrap-around carrier for a plurality of containers comprising a bottom, a pair of opposed side walls, attached to said bottom, a pair of end walls attached to said bottom and said side walls, an internal partition member attached to

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said bottom and said end walls, and a top cover comprising a central portion and inclined lateral portions connecting said central portion to said side walls, wherein at least the major portion of said top cover is connected to said side walls by tear strips provided in said lateral portions, said partition member having a handle defined by an opening provided in the upper portion of said partition member in proximity to said top cover and the central portion of said top cover having an opening through which said handle is accessible.

A preferred embodiment of the carrier contains an elongate hole formed in the top panel of the carrier in proximity to an elongate hole formed in the upper portion of the partition member within the carrier. When the carrier is transported with full bottles from the store to the consumer, the elongate hole in the partition member is accessible through the elongate hole in the top panel and can be used to carry the package. When the top cover is separated from the side of the carrier at the consumer's home, the elongate hole in the upper region of the partition member may then be used to transport the opened carrier, with the empty bottles, back to the store for return of the deposit. Thereafter the carrier may be re-used by the bottler as a simple basket-style carrier for distribution to other sources.

The invention also seeks to provide a returnable wrap-around carrier which may be quickly and simply converted to a partitioned basket carrier by removing the major part of the top cover thereby aiding in the ecology of the country by preventing pollution of the countryside from the throw-away carrier packages.

The invention further seeks to provide a returnable wrap-around carrier that may be quickly and economically fabricated and in which the interior partition member having the handle opening is fabricated either integrally with the remainder of the carrier or as a separate partition member which is rigidly attached to the end walls and bottom of the carrier.

Preferred embodiments of the invention will now be described by way of example and with reference to the accompanying drawings in which:—

Figure 1 is a side perspective view of a returnable wrap-around carrier manufactured in a one piece construction and showing the carrier as totally enclosed and ready for transporting from the store to the consumer;

Figure 2 is a side perspective view of the carrier shown in Figure 1 showing the top cover partially removed from the remainder of the carrier and showing the exposed interior handle

Figure 3 is a side perspective view of the returnable wrap-around carrier formed in a two piece construction and ready for transportation from the store to the consumer;

Figure 4 is a side perspective view of the carrier shown in Figure 3 showing the top cover partially torn off to expose the handle opening formed in the upper portion of the partition;

Figure 5 is a top view of the production blank used in the formation of the two piece carrier shown in Figures 3 and 4,

Figure 6 is a plan view of the partition as used in the two piece construction shown in Figures 3 and 4;

Figure 7 is a plan view of approximately one-half of the production blank used in forming the one piece carrier shown in Figures 1 and 2; and

Figure 8 is a plan view of the other half of the one piece production blank shown in Figure 7.

Referring now to the drawings in general and in particular to Figures 1 and 2 of the drawings, the returnable wrap-around carrier 10 comprises a bottom comprising two panels 12 and 12' attached at their opposite ends to a pair of side walls formed by panels 14 and 16. The carrier 10 also includes an end wall formed by a first pair of end panels 18 and 20 which are fixedly attached to each other and to the side panels 14 and 16 and to the bottom. At the other end of the carrier 10, as best shown in Figure 2 of the drawings, is an end wall comprising a second pair of end panels 22 and 24 which are attached to each other and to the side panels 14 and 16, respectively, and to the bottom of the carrier.

The carrier top cover comprises a pair of panels 28 and 30 which overlap to define a central portion of the cover, and each of which includes a lateral portion 32 and 34 which connects the central portion of the cover to an adjacent side wall. Tear cuts 26 are formed in the panels 28 and 30, enabling a major portion of the cover to be detached from either one of the side walls 14 and 16 to open the carrier, as shown in Figures 2 and 4.

The top cover panel 28 is formed in such a manner as to overlap the top panel 30 and is attached thereto by means well-known in the art, such as glue. The top cover panel 28 also has formed therein a handle opening 36 which may be used by the purchaser of the package as will be more fully described hereinafter. Formed within the package and integrally therewith is a double thickness central partition 38, 38' which is attached to the end panel 22 by means of a tab 40 and is also attached to the end panel 24 by means of a tab 42. Although not shown in Figure 2 but shown

in Figures 7 and 8 of the drawings, the central partition 38, 38' also has a second set of tabs 44 and 46 for anchoring the central partition 38, 38' to the end panels 18 and 20.

The central partition 38, 38' also has formed in the lower portion thereof, by means well-known in the art, a pair of double thickness butterfly panels 48, 48' which are pivotally mounted to the central partition by means well-known in the art and forming no part of this invention. The central partition, as well as the butterfly panels, serves as the means for separating the bottles contained within the carrier from direct contact with each other. Formed in the upper portion of the central partition is a partition handle opening 50, 50' which is in close proximity to the top panel handle opening 36 when the carrier is closed for the reason which will be more fully detailed hereinafter.

Referring now to Figures 8 and 7 of the drawings, respectively, there is shown in detail the production blank of the returnable wrap-around carrier shown in Figures 1 and 2 of the drawings and which comprises the top cover panel 28 having the lateral portion 32 formed therein by means of a score line 52. A plurality of caps 54 are formed in the top panel 28 by means of die cuts 56. Located in the lateral portion 32 are a plurality of tear cuts 26 which serve as the means for removably detaching the major portion of the top panel 28 from the side wall 14.

The side wall 14 is hinged by means of a score line 58 to the lateral portion 32 as well as to the end panels 18 and 22 by means of score lines 60 and 62. Formed in the lower portion of the side wall 14 is a plurality of bottle receiving openings 64 formed between a pair of score lines 66 and 68 in the configuration shown in the drawing. A panel 12 is hinged to one-half of the central partition member 38, 38' by means of a score line 70, it being understood that the central partition 38, 38' is formed in a double thickness as necessitated by this one piece construction. The central partition portion 38 also has two tabs 42 and 46 formed on the outer sides thereof by means of score lines 72 and 74. These tabs serve to rigidly fasten the bottom portion of the central partition to the end panels 20 and 24. The fastening means may be glue, staples, or other means well-known in the art.

Formed in the lower portion of the central partition portion 38 is a pair of butterfly panels 48 pivotally mounted so as to serve as partition dividers for the bottles contained within the carrier. Formed in the upper portion of the central partition portion 38 is the partition handle flap cut-out

50 which may be an elongate opening as shown in Figure 8 of the drawings or may be formed as two handle openings similar to those in the two piece embodiment shown in Figure 4 of the drawings. For purposes of clarity and in order to better understand how the central partition is formed in a double thickness, the drawing of the production blank has been shown in Figures 7 and 8 with score line 76 representing the top of the central partition portion 38 about which the second portion 38' of the central partition is folded. Referring now to Figure 7 of the drawings, there is shown the remaining portion 38' of the central partition hinged to the central partition portion 38 at the score line 76. The central partition portion 38' has formed in the upper portion thereof a partition handle opening 50' corresponding to the partition handle flap cut-out 50 in the central partition portion 38. Also formed on the outer edges thereof by means of a score line 78 and a score line 80 are two tabs 40 and 44 which serve as the means of anchoring the upper portion of the central partition 38 and 38' to the side panels 22 and 18.

Formed in the lower portion of the central partition portion 38' are a plurality of butterfly panels 48' similar to the butterfly panels 48 and serving the same purpose within the carrier. Hingedly attached at a score line 82 is the second bottom panel 12' of the bottom which is also hinged by means of score line 84 to the side wall 16. Also formed between the score line 84 and a score line 86 in the side wall 16 are a plurality of bottle receiving openings 64 which serve to receive the lower portions of the bottles contained within the carrier and prevent their sideways movement during transportation of the carrier. The side wall 16 has an end panel 20 and an end panel 24 formed on each side thereof by means of score lines 88 and 90, the end panels 20 and 24 being attached to the end panel 18 and end panel 22 by means of glue, staples, or some other means well-known in the art. Hinged to the side panel 16 by means of a score line 92 is the lateral portion 34 of the top cover panel 30 which also contains a plurality of tear cuts 26 located in the position shown in the drawings for the purposes of separating the major portion of the top cover panel 30 from the adjacent side wall 16. A plurality of caps 54 are formed in the top panel 30 by means of the die cuts 56.

When the carrier blank heretofore described has been formed into the one piece carrier shown in Figures 1 and 2 of the drawings and contains a plurality of full bottles (not shown in the drawings for the purposes of clarity), then the purchaser of

the carrier simply inserts his fingers into the top handle opening 36 and through the partition handle opening 50, 50' and transports the full carrier. In order to open the carrier and extract the bottles, the consumer simply tears off an elongated strip 94 formed by the tear cuts 26 in either side of the top cover to expose the bottles contained within the carrier. After the empty bottles have been replaced in the compartments within the carrier, the consumer may then re-use the top cover handle opening 36 in conjunction with the partition handle opening to return the carrier with the empty bottles back to the store for return of his deposit. If both tear strips 94 are removed, the major portion of the top cover is completely detached and the carrier becomes in effect a multicell basket carrier and the partition handle opening 50, 50' would then be used to convey the carrier with its empty bottles back to the store. Thereafter the carrier may be re-used as a multi-cell basket carrier to other sources of supply where the wrap-around type carrier is not desired or necessary.

Referring now to Figures 3, 4, 5 and 6 of the drawings, there will be described briefly a modification wherein in the returnable wrap-around carrier 10 may be formed in a two-part construction with the central partition being formed separate from the remainder of the blank. In describing the two-part construction, the details of the bottle receiving caps 54, the bottle receiving opening 64, and the function of the tear cuts 26 and the tear strips 94 will be omitted in the interest of brevity. In addition, the side walls 14 and 16 as well as the end wall panels 18, 20, 22 and 24 are formed and located in a manner similar to the one piece construction.

The bottom panel 96 is hinged by means of score lines 100, 102 to the side walls 14 and 16 as shown in Figure 5 of the drawing. Formed in the central portion of the bottom panel 96 are two tab receiving openings 106 which are designed to receive two tabs 108 formed in the separate central partition 110. It should be understood that in this two-part embodiment the central partition 110, while being formed separate from the basic blank, may be a single ply of paperboard or may be formed by folding in a manner similar to the central partition 38, and 38'. The upper portion of the central partition 110 also has two separate handle openings 112 similar to that shown in Figure 6 of the drawings or an elongate handle opening similar to that shown in Figure 2 of the drawings.

Also formed on the central partition 110 are two tabs 114 and 116 which are hingedly attached thereto by means of score

lines 118 and 120, respectively. In addition tabs 122 and 124 are formed by means of die cut lines 126 and 128. The tabs 114 and 116 are attached to the end panels 22 and 18 by means well-known in the art, such as glue or staples. In addition, the tabs 122 and 124 are fixedly attached to the end panels 24 and 20 by the same means thereby rigidly fastening the separate partition 110 to the erected blank of Figure 5. The tabs 108 are inserted through the tab openings 106 in the bottom and are rigidly attached thereto, for example, by glue or staples, thereby rigidly anchoring the bottom portion of the central partition 110 to the bottom 96. Formed in the top cover panel 130 is a plurality of handle openings 132 defined by die cut lines similar in size and location to the partition handle openings 112. The use of the two piece carrier as well as the function of the handle openings is similar to the one piece construction.

#### WHAT WE CLAIM IS:—

1. A wrap-around carrier for a plurality of containers comprising a bottom, a pair of opposed side walls attached to said bottom, a pair of end walls attached to said bottom and said side walls, an internal partition member attached to said bottom and said end walls, and a top cover comprising a central portion and inclined lateral portions connecting said central portion to said side walls, wherein at least the major portion of said top cover is connected to said side walls by tear strips provided in said lateral portions, said partition member having a handle defined by an opening provided in the upper portion of said partition member in proximity to said top cover and the central portion of said top cover having an opening through which said handle is accessible.

2. A carrier according to claim 1, wherein said partition member is formed integrally with the remainder of said carrier in a one piece construction.

3. A wrap-around carrier according to claim 1 or claim 2, wherein said top cover is formed with the lateral portions thereof sloping downwardly from said central portion towards said side walls and is detachably connected to said side walls by tear strips defined by a plurality of tear cuts positioned in the regions of the lateral portions of said top cover adjacent said side walls.

4. A wrap-around carrier according to claim 1, wherein said bottom, said side walls, said end walls, and said top cover

are formed from a single blank and said partition member is formed as a separate member attached to said bottom and said end walls.

- 5 5. A wrap-around carrier for a plurality of containers substantially as hereinbefore described with reference to the accompanying drawings.

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Printed for Her Majesty's Stationery Office by The Tweeddale Press Ltd., Berwick-upon-Tweed, 1975.  
Published at the Patent Office, 25 Southampton Buildings, London, WC2A 1AY, from which copies  
may be obtained.

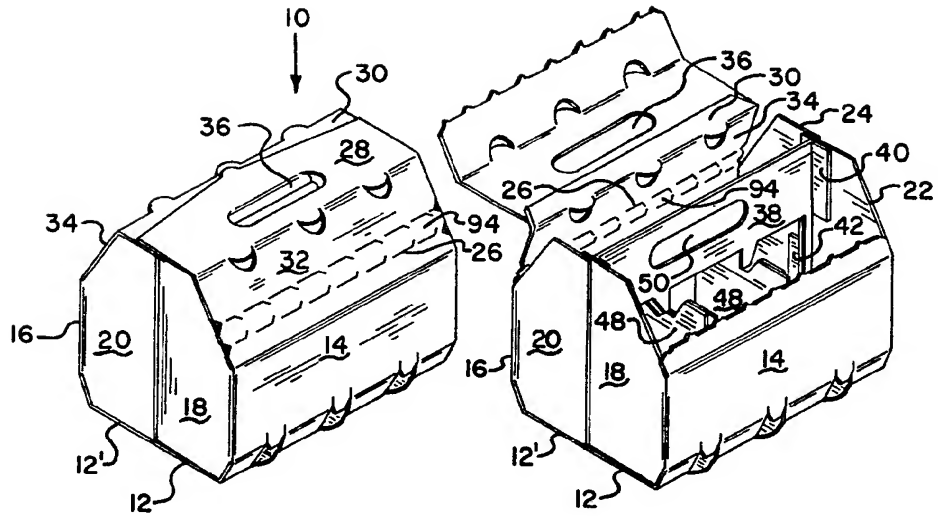


FIG. 1

FIG. 2

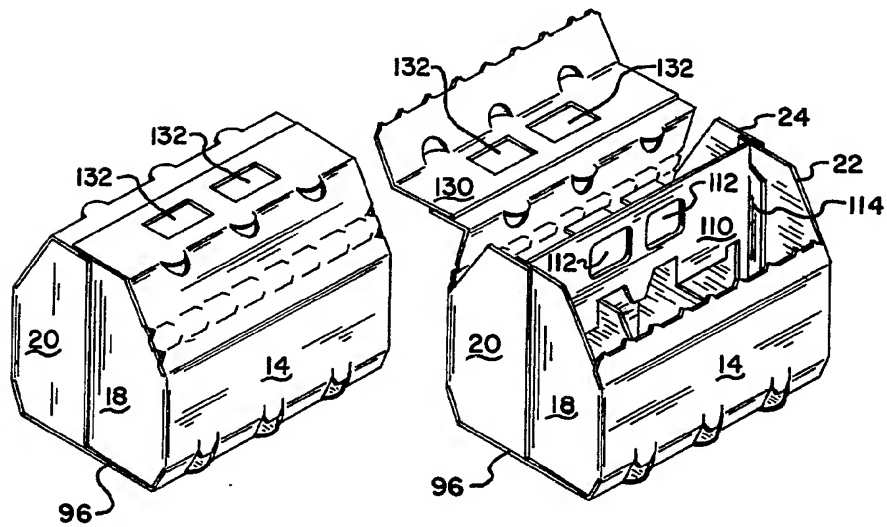


FIG. 3

FIG. 4

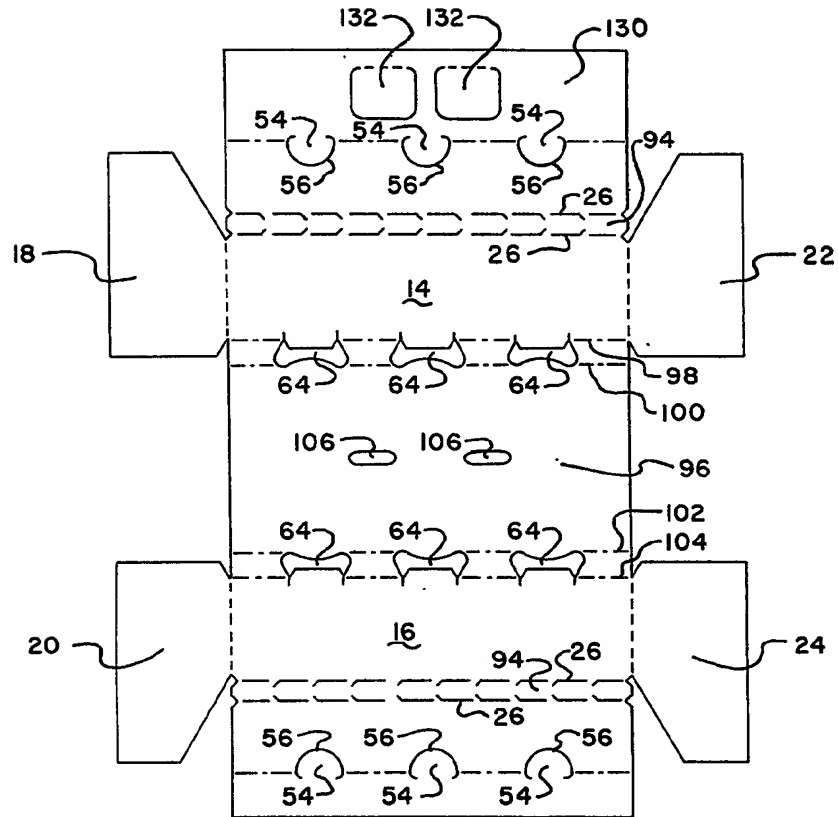


FIG. 5

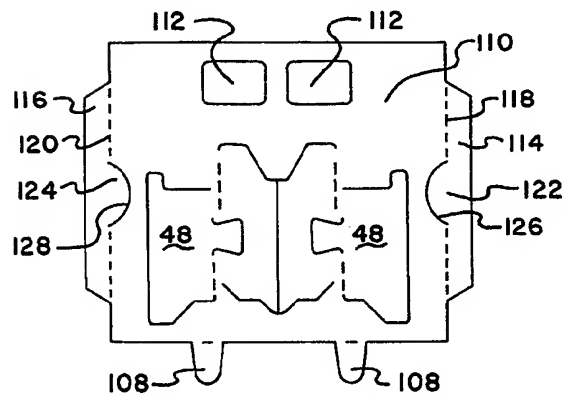


FIG. 6

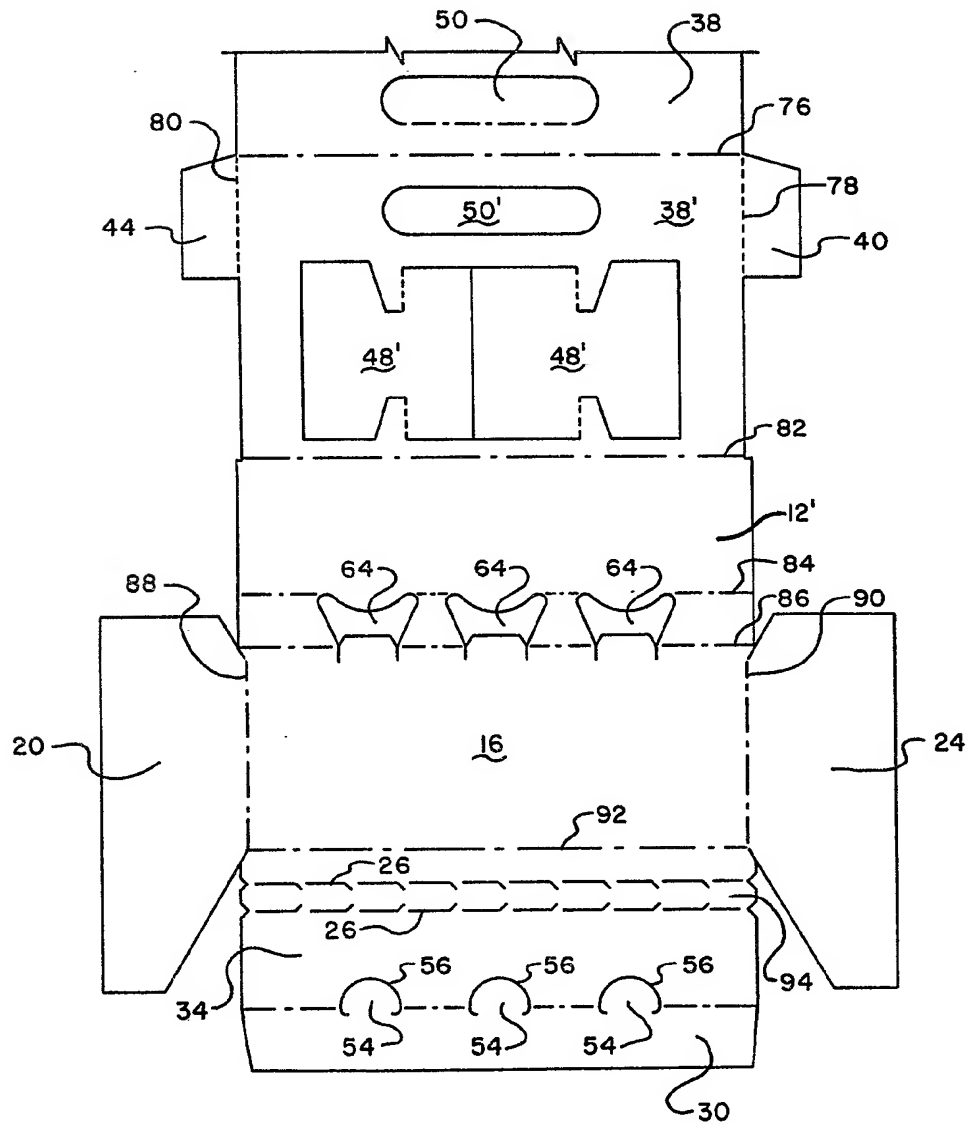


FIG. 7

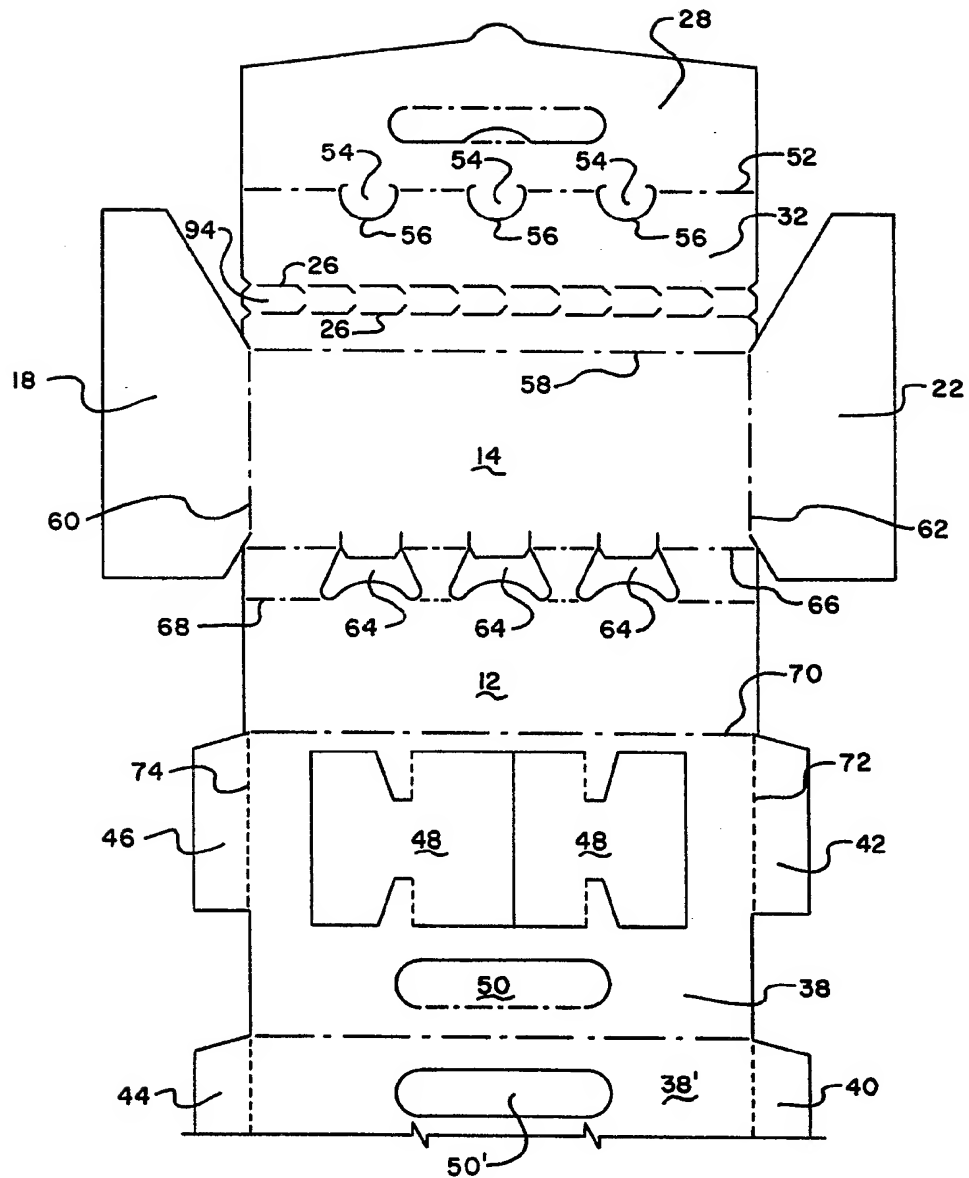


FIG. 8